

SCOTTISH EDUCATION DEPARTMENT

Degrees of Mental Handicap

*Report of the Working Party
on Standards of Ascertainment
for Scottish Schoolchildren*



EDINBURGH

HER MAJESTY'S STATIONERY OFFICE

1961



CONTENTS

<i>Chapter I:</i> Introduction	<i>Page</i> 6
<i>Chapter II:</i> The "Educable" Child	9
<i>Chapter III:</i> The "Trainable" Child	14
<i>Chapter IV:</i> The "Untrainable" Child	17
<i>Chapter V:</i> Tests of Intelligence and Educational Attainment	20
<i>Chapter VI:</i> Borderline Cases in Ordinary Schools	24
<i>Chapter VII:</i> Conclusion	25
<i>Appendix:</i> Sources of Evidence	27

TO THE RIGHT HONOURABLE J. S. MACLAY, C.M.G., M.P.,
Secretary of State for Scotland.

SIR,

In December, 1960, you invited a number of organisations with interests in special education to nominate members to serve on a working party with the following remit:

- “ To consider what standards should be offered for the guidance of education authorities in ascertaining children as
- (i) being mentally handicapped and requiring special educational treatment in
 - (a) a special school other than an occupational centre;
 - or (b) a special school which is an occupational centre;
 - or (ii) suffering from a disability of mind of such a nature or to such an extent as to make them unsuitable for education or training in a special school.”

The Working Party as a whole, or sub-committees set up to examine different aspects of its subject, met on twenty-three occasions, in the course of which we considered written evidence, and in most cases also heard oral evidence, from the persons listed in the Appendix, whose help and advice we wish to acknowledge with gratitude. We also wish to thank those teachers and psychologists in many urban and rural areas who gave information to individual members of the Working Party.

We now have the honour to submit the following report.

TO THE RIGHT HONOURABLE J. S. MACLAY, C.M.G., M.P.,
Secretary of State for Scotland.

SIR,

In December, 1960, you invited a number of organisations with interests in special education to nominate members to serve on a working party with the following remit:

“ To consider what standards should be offered for the guidance of education authorities in ascertaining children as

(i) being mentally handicapped and requiring special educational treatment in

(a) a special school other than an occupational centre;

or (b) a special school which is an occupational centre;

or (ii) suffering from a disability of mind of such a nature or to such an extent as to make them unsuitable for education or training in a special school.”

The Working Party as a whole, or sub-committees set up to examine different aspects of its subject, met on twenty-three occasions, in the course of which we considered written evidence, and in most cases also heard oral evidence, from the persons listed in the Appendix, whose help and advice we wish to acknowledge with gratitude. We also wish to thank those teachers and psychologists in many urban and rural areas who gave information to individual members of the Working Party.

We now have the honour to submit the following report.

Chapter I: Introduction

REQUIREMENTS OF THE STATUTES

1. Since the passing of the Education (Scotland) Act, 1945¹, education authorities have had a duty to ensure that children who appear to them to require special educational treatment shall receive it. They are also obliged to ascertain which children in their area who have attained the age of five years require special educational treatment. The experience of many years has shown that the handicap which most frequently makes it advisable for a child to be taught by persons with special training and experience is what is variously referred to as "lack of intelligence", "mental handicap" or "mental retardation." The definition of this type of handicap is no easy task, and was one of the subjects of the Report of the Advisory Council on Education in Scotland entitled "Pupils with Mental or Educational Disabilities", published in 1951². As a result of the 1951 Report and other reports of the Advisory Council the different types of handicap which seemed to call for special educational treatment were defined by regulations³, which created the category, among others, of "mentally handicapped pupils, that is to say, pupils who have little natural ability."

2. It was not intended, however, that all such pupils should receive the same type of special education. It had already been recognised that, while the majority of children with little natural ability could benefit from education in special schools, there was a degree of handicap which required what could be called "training" rather than "education"; and in some areas schools of the kind known as "occupational centres" had been provided for these children⁴.

3. There are, however, some children so handicapped mentally that they cannot benefit from training of the sort which an education authority can be expected to provide. The 1945 Act made it the duty of the education authority to identify these children – if they had not already been identified by the age of five – and to report them to the local health authority⁵, which should provide the special care required. In many cases the handicap is obvious before the age of five, and the Act enabled a child's parent to request the education authority to arrange for him to be medically examined at any time after his second birthday. The Mental Health (Scotland) Act, 1960, extended the education authority's duty of reporting children so as to include those between the ages of two and five who came to their notice in this or any other way.

¹ Now consolidated in the Education (Scotland) Act, 1946.

² H.M.S.O., 1951, Cmd. 8401. For the sake of brevity we shall refer to this as "the 1951 Report."

³ The Special Educational Treatment (Scotland) Regulations, 1954.

⁴ For statutory purposes, "special school" includes special classes forming part of primary schools and secondary schools, child guidance clinics and occupational centres. In this report, however, we shall use the term "special school" in its narrower sense, which excludes occupational centres and child guidance clinics but includes special classes. Confusion has also been caused by the fact that centres provided by local health authorities for the type of child described in Chapter IV are often called "occupation centres." In our view it would be preferable to call the local health authority's centres "care centres"; and we shall refer to them as such in this report.

⁵ The 1945 Act provided for reports to be made to the local authority for the Mental Deficiency Acts, which became known as the local health authority after the coming into operation of the National Health Service (Scotland) Act, 1947.

4. Thus in the field of mental handicap alone there are three groups of handicapped children which, however gradually they may shade into each other, have to be distinguished for the practical purpose of ensuring that each child receives education or training of the kind best suited to his abilities. These are:

- (i) children who should receive education in a special school; we shall refer to them, for the sake of brevity, as "educable" children;
- (ii) children who should receive training in an occupational centre such as those provided by education authorities; we shall refer to them as "trainable" children;
- (iii) children who should be cared for by the local health authority; we shall refer to them as "untrainable" children although, as we shall emphasise later, many are in fact capable of training in limited ways.

There is no doubt in our minds that this sub-division, rough and ready as it may be, is in the interests of the children themselves, who can often be helped by special skill and attention to attain a level of achievement which they would not otherwise reach.

THE NEED FOR CRITERIA

5. The 1951 Report described children in the "educable" group as having intelligence quotients ranging from 55 to 70 and children in the "trainable" group as having intelligence quotients ranging approximately from 40 to 55, while recognising that these limits could be only a rough guide. It recommended that in making plans for the primary and secondary education of mentally handicapped pupils in urban and rural areas an incidence of 1.5 per cent. should be assumed, with slight increases or decreases according to the character of the area, and that the incidence should be assumed to be greater among boys than among girls.

6. Subsequently, a conference held under the auspices of the Association of Directors of Education in Scotland and of the Scottish Council for Health Education led to the setting up of a working party in 1952 "to study the reports of the Advisory Council, to consider the administrative machinery that will be necessary for their implementation, and to make recommendations." Its report contained estimates, based largely on the incidence assumed by the Advisory Council, of the numbers of children suffering from the recognised handicaps who were likely to be found in each education authority's area. In September, 1958, this report was sent to education authorities with the request that they should examine, in the light of the estimates, the number of pupils in their areas who had been found to be suffering from these handicaps; should satisfy themselves that their arrangements for ascertainment would ensure that all pupils with a recognised handicap were known to the authority; and should inform the Scottish Education Department of the result. It was clear from the replies that there were very great variations in the standards adopted by different authorities in assessing whether a child was sufficiently handicapped to require special education: in many areas the percentage of children "ascertained"¹ fell far below

¹ From its use in Section 54 of the Act, "ascertained" has now come to be used as a technical term, meaning "assessed by the education authority as suffering from the handicap in question to a degree which calls for special educational treatment."

the probable figure. The variations were most pronounced in the case of mental handicap, and it seemed likely that one of the reasons for this was the lack of detailed guidance on the standards which ought to be adopted.

7. Our task was therefore to recommend criteria for deciding whether individual children are mentally handicapped to such an extent that they would benefit from attending, instead of an ordinary primary or secondary school -

- (i) a special school or class;
- or (ii) an occupational centre;
- or (iii) a care centre provided by a local health authority.

8. Some children are handicapped not only by limited intellect but also by psychological maladjustment or physical or sensory defects - for example, of sight, hearing or speech. These cases of "multiple handicap" present diagnostic problems of some difficulty, since it is not easy to be sure of the extent to which apparent lack of ability to learn is an effect of the other handicaps. It seemed to us, however, that such cases have to be considered in the light of reports by appropriate specialists, with the help of such advice as we could give on the assessment of mental handicap. While recognising, therefore, that "ascertainment" involves the examination and assessment of the child as a whole, we have not attempted to discuss the problems of multiple handicap.

9. Another category which requires special mention is that of the child who needs residential care and even in some cases nursing. He may need this because of circumstances which make it impossible or undesirable for him to be brought up at home or it may be that he is suffering from a physical or emotional handicap so severe as to call for special residential care. These are misfortunes which can befall any child; but when they befall the mentally handicapped the need for residential care should not prevent them from receiving special education or training at the level appropriate to their abilities.

PUBLIC ATTITUDE

10. It is unfortunate for the development of special education that the ridicule and even disgrace which an unenlightened age attached to mental handicap or disorder have not yet been completely eradicated from the mind of the general public. Often the task of an education authority in deciding whether a child would benefit from being placed in a special school or occupational centre is rendered even more complex by the reaction of his parents. Unlike the parents of blind, deaf or crippled children they may not only be unwilling to admit that the handicap exists, but also be afraid and resentful of what they regard as an indelible stigma both on the child himself and on his family. There is no denying that in the present state of public opinion a diagnosis of mental handicap has consequences for the individual which reach beyond the classroom. In these circumstances education authorities should not only regard it as part of their task to convince the parents that special education is in the interests of their child, and to influence the attitude of the general public in their areas, but should also take the greatest care in making a diagnosis of mental handicap.

11. This report is therefore designed primarily for the assistance of those who have a professional part to play in the ascertainment of mentally handicapped children. One minor consequence of the public attitude which we have just described is that it has been thought necessary to devise euphemisms for this

type of handicap; and as each euphemism became too plainly understood a new one has been substituted. Euphemisms have a useful function in public relations, but they perform it chiefly by being ambiguous: since our task is to be unambiguous we have made a point of choosing terms with the most precise meaning.

Chapter II: The "Educable" Child

12. This chapter is concerned with the first borderline, which separates children capable of benefiting from education in an ordinary school from those who, although educable, are so handicapped by poor natural endowment as to require the advantages of special educational treatment. The latter form the largest of all the categories of mentally handicapped children and consequently present an educational problem of considerable magnitude. Moreover, the task of convincing the parents, in the face of the attitudes which we have described in paragraph 10, that their child is in fact mentally handicapped is greater than in the case of any of the other handicaps. Consequently we regard the determination of this borderline as the most important part of our remit.

THE TYPICAL CASE

13. It may be useful, in the first place, to describe in very general terms the typical child whom one would expect to find in a special school, and this is most easily done by contrasting him with the child of average ability in the ordinary school. The latter is expected to achieve working competence in certain basic "tool" subjects of education. By the age of twelve he is able to read with understanding, to express himself intelligibly in writing and to understand at least the four rules of number and their application to common measures. He has been introduced to history, geography, nature study and the arts. His acquired skills are regarded as a foundation capable of bearing the weight of a secondary education; his interests have been awakened in manifold ways and he is approaching the stage of mental development needed for appreciation of the sciences and humanities of the adult world. By contrast, the typical "mentally handicapped" child takes much longer to learn even the mechanics of reading and may indeed require all his time at school up to the age of sixteen to reach such a level that the ability will not wither in later years. He can be expected, after constant practice, to write his name and address legibly and perhaps put together one or two sentences, but he will probably not manage to express much constructive thought in writing. He will learn enough addition and subtraction to serve his simple practical needs but may not appreciate the application of multiplication and division. He will enjoy history if it is presented as a colourful narrative but will not remember it well. Geography as an account of lands and peoples may have some meaning for him but the conventional representation of the earth's dimensions on a flat surface may be impossible for him to comprehend. He is unlikely to show much scientific curiosity or experience even the beginnings of literary appreciation. His attainments in art, music, handicrafts and physical education may show promise - some children do very well indeed, particularly in art and crafts, with the liberal help which they can obtain in the special school - but are still likely to be below the standards of normal children.

14. It follows that the objectives of education in the special school must be more limited, the pace slower, the content more practical, the motivation simpler and more direct, and that what is attempted at the "secondary" stage can bear little resemblance to the work of the ordinary secondary school, at least on the academic side. At the same time we also wish to emphasise the extremely valuable part which the special schools have to play in the educational system. They have the great advantage that the education they provide is not dominated by the traditional demands of the primary curriculum; they are free to make the best use of their pupils' limited powers and to provide a setting in which the children can enjoy success at their own level without the continuous discouragement which results from comparison with other children. We have been describing, too, the typical child in the two kinds of school in order to show that separate provision is justifiable, and because we think it is important that administrators should have a broad mental picture of what each kind has to offer when they are making a decision about any particular child.

15. We recognise that both the ordinary and the special school have to deal with a wide range of pupils, but we think that neither should include pupils differing so much in their interests and capabilities that the sense of belonging to a group is lost. Any class and indeed any school should have a measure of homogeneity in its members so that there can be common interests and pleasures, a common spirit and common endeavour. With this reservation the ordinary school should extend its provision as far down the scale of ability as it can, and every effort should be made to keep children in the ordinary stream by the use of group and individual methods and by the modification of the curriculum in so far as this can be done without abandoning the main aims of the primary course.

THE BORDERLINE CASE

16. We have tried to describe typical children on both sides of the dividing line, but the line cannot be firmly drawn by reference to any objective standard. It would be a gross over-simplification to suppose that there is some fixed point on a scale marking the end of normality and the beginning of handicap. Even if a perfect system of ranking for educational potential could be devised, at any one part of the scale there would be differences only of degree, not of educational category. We have to recognise frankly that in borderline cases the decision to place a child above or below the line will always be to some extent arbitrary and subjective, but for administrative reasons it is a decision which will still have to be made. The best we can hope to do is to use objective criteria as far as they can be used to limit the area of subjective judgment.

17. Some of our witnesses have stressed the need for flexibility in the placing of borderline children, arguing that transfer to a special school might be arranged for a temporary period after which, if the child showed more promise than had been expected, he could be returned to the ordinary school. We agree that decisions should never be irreversible and that by means of regular review of the progress of children in special schools any child who has improved sufficiently should be promoted. In practice, however, there is almost no promotion from special schools. The reason probably is that it has seldom been regarded as the function of the special school to give the kind of tutorial help, designed to fit

him into the main stream, which a backward child may receive in an ordinary school. As paragraphs 13 and 14 indicate, the pace of learning, the curriculum and the methods of the special school are different, and these circumstances are unfavourable to the child who might otherwise have been able to keep his place in an ordinary class. If a trial period is needed, therefore, it should take place in the primary school, before ascertainment is complete, rather than in the special school. This has the incidental but important advantage that it avoids causing anxiety to the parents of a child who in the end may be retained in the ordinary school.

18. We now have to consider what suggestions we can offer in order to secure more uniform standards of ascertainment throughout the country. The Advisory Council stated that "children in special schools or special classes . . . have intelligence quotients ranging from 55 to 70, but these border-lines are not and should not be firmly drawn." For many years an intelligence quotient of 70 has been regarded as the rough line of demarcation between children who are mentally handicapped and those who are not, and the experience of our members confirms that, in general, children selected by this criterion have proved to be in need of special educational treatment. Many children with higher intelligence quotients have also shown their inability to make progress in the ordinary school. While we have insufficient evidence to suggest that the distinction should be drawn higher, we feel that 70 is not too high, and that the children about whom there is doubt usually have quotients greater than 70¹.

THE ROLE OF TESTS

19. Nearly all our witnesses have rightly stressed the danger of basing a decision on a single test of intelligence, pointing out that emotional factors can depress the score to a significant degree and that in a case of uneven development the score at any one time may be unreliable and unpredictable. We cannot agree with others who attempt to discredit the intelligence quotient entirely, on the ground that it is not a measure of "pure" innate intelligence. We are not, after all, concerned to find such a measure. Our purpose is practical, namely to discover children of low educability, and we feel that the best intelligence tests in current use, sampling as they do many of the abilities of children which are needed in the learning situation, are still valuable predictors of performance in school.

20. Exclusive reliance on attainment tests administered on a single occasion, or on school marks, is open to the objection that the causes of educational retardation are not revealed by these means. The causes may include unfavourable conditions in the home, interrupted schooling, frequent changes of school or teacher, ineffective teaching methods, over-size classes, lack of individual help, sensory or perceptual disabilities in the child or maladjustment manifesting itself in loss of self-confidence, inability to concentrate or emotional disturbance. Before deciding that a child is "mentally handicapped" we have to be sure that he has had a fair chance and that his failure is due to some incapacity either inherent in him or, if arising from environmental influences, so deeply rooted that it cannot be removed by any remedial measures which the education authority is able to apply.

¹ This statement should, of course, be read in conjunction with Chapter V, paragraph 57.

21. In all cases of suspected mental handicap, therefore, there should be a complete medical and psychological examination of the child and a study of the home and school situations, in consultation with teachers and parents, directed towards discovering the causes of retardation and applying such remedies as are available. In particular, the examination should seek to discover whether there is any disability present, such as maladjustment, for which some other form of special educational treatment is more appropriate. All relevant aspects of the child's development should be taken into account, the aim being to evaluate the needs and potentialities of the whole individual. The examination should include individual intelligence and attainment tests and any other tests which may appear to be relevant and useful, such as are described in Chapter V of this report.

22. The intelligence quotient should not be used as a final criterion. It is probably the most objective and reliable of the psychometric measures available and is invaluable as a single item contributing to the evidence assembled in the course of a thorough and comprehensive examination, but it is still too imprecise in its implications to serve as a substitute for critical assessment of all the factors influencing individual cases. The intelligence quotient is best regarded as a pointer to the final decision, to some extent narrowing the field of subjective judgment. Thus if the quotient were found to be clearly under 70 and the attainments were in keeping with it this would suggest that the child could reasonably be classified as mentally handicapped, but a full examination would still be needed. With the same proviso, if the intelligence quotient were under and the attainment quotients¹ over 70 it might be reasonable to defer making any decision for so long as the child's progress continued at a satisfactory rate. If both intelligence and attainment quotients were above 70 a decision on any other grounds that the child was mentally handicapped might be hard to justify. If the intelligence quotient were above and the attainment quotients below 70 we should have a typical borderline case requiring an intensified search for other factors such as are mentioned in paragraph 20. An important secondary advantage of intelligence testing is that, since it provides a wide sampling of abilities examined under controlled conditions, it can be very revealing to the examiner and can suggest further lines of investigation.

PROGRESS AS A CRITERION

23. So far we have left considerable room for subjective judgment, especially in borderline cases, but we feel that well-founded decisions can still be arrived at if what we are looking for can be stated in fairly exact terms. The real criterion in this matter is not the child's theoretical store of native "intelligence" but his ability or inability to profit from education in the ordinary school. It has often been said that the best test of one's ability to do anything is to try it, and we feel that a child about whom there is doubt should not be denied normal education until he has tried under favourable conditions and failed. By "favourable conditions" we mean that the teaching should have been efficient and that he should have been given as much help by group or individual methods as a good school

¹ Since the quotients obtained by means of attainment tests are affected to a very large extent by the type of education the child has received, and the norms are not always reliable, any such measures must always be used with proper awareness of their limitations for our purpose. In the case of children who have made no educational progress published attainment tests are useful only for their negative indications.

can be expected to provide. A child on the borderline should therefore be considered to be mentally handicapped if he fails, under favourable conditions, to maintain a rate of progress in the ordinary school equivalent to the average rate of progress of children of the same age having an intelligence quotient of 70, and if his failure cannot be attributed to a disability for which some other recognised form of special educational treatment is appropriate.

24. An adequate system of ascertainment should therefore provide for the investigation of doubtful cases over a period of weeks or months. During this time favourable conditions of teaching should be created, if they do not already exist, in order to enable an opinion to be formed, independently of the school reports, of the child's ability to satisfy the proposed criterion of suitability for education along with ordinary children. This would be achieved by observing his response to efficient teaching given individually or in a small tutorial group. Ideally the teaching should be done by a person of proved skill, accustomed to working with the ascertainment team, appreciating the implications of the decision they have to make and with accumulated experience of children near the critical borderline; it should be sustained teaching, daily if possible, provided in the familiar setting of the child's own school and requiring only short periods of separation from his classmates. The detailed report which would be provided by the tutorial teacher to the ascertainment team at the end of the observation period would make their decision very much easier. Some of the practical aspects of this suggestion are discussed more fully in Chapter VI.

25. We may now consider what signs the teacher is to look for during this time. The criterion proposed in paragraph 23 means that, if he is to remain in the ordinary school, the child should be able to learn at such a rate that he can match the attainment of children of average ability who are thirty per cent. younger. If the usual age of transfer to a special school is seven, it follows that the borderline children under special observation will normally be between seven and eight years old with mental ages from under five upwards. Since attainment tests are not very informative at this level, the teacher's judgment will have to be based on her knowledge of the progress made by average children beginning school, and allowances must be made for variations in the approach to formal teaching between one school and another. Interpreting the criterion broadly, we would say that between the ages of seven and eight the child must be able to make at least as much progress as the average child makes between five and five-and-a-half. When older children are under observation it will be useful to apply standardised attainment tests at intervals; the results should give a measure of learning rate which would acquire significance as more and more experience of borderline cases was gained and as a clearer idea emerged of what progress could be expected of children at this level of intelligence. Particular attention should be paid to improvement in reading, with the expectation that a child with an intelligence quotient of 70, reading up to his mental age, should be able to read with understanding at a level of eight-and-a-half to nine years by the time he is due for promotion to secondary education. The ability to understand and apply the four rules of number is also a desirable target for primary schooling but we should be prepared to accept a fairly low standard of arithmetic if it were sufficient to meet the simple, practical needs of everyday life. These general remarks do not of course apply to children who have suffered neglect or serious loss of school time, since in such cases it would not be reasonable to relate expected progress to chronological age.

26. We wish to emphasise that we have been speaking in the last two paragraphs about doubtful cases only. We do not advocate delay in transferring children to special schools if the ascertainment team is satisfied that they are mentally handicapped. In such circumstances it is to the advantage of the children that they should settle down in a special school as early as possible in order to derive full benefit from education which is designed for them. Occasionally the need may be anticipated even before the child reaches the age of five or, more frequently, it will become obvious during his period in the infant department in the ordinary school. Most of the children, however, are likely to remain for at least two years in the ordinary school. We now have to consider, therefore, what means should be used to ensure that ascertainment will operate most effectively at the end of the infant stage. In most areas children are referred to the education authority or the child guidance service when they become obvious failures in class; but this system is not in itself sufficient because the criteria vary from school to school, because some teachers are more vigilant than others and because for a variety of reasons long delays may occur.

A SCREENING TEST

27. We suggest that at the age of seven a group test of intelligence should be applied to the whole age-group for the purpose of screening. Children scoring below a fixed point should then be selected for examination by individual tests of intelligence and attainment, and those suspected of mental handicap should receive a full medical and psychological examination on the lines already suggested. Opinions vary as to the location of the fixed point. We think that few mentally handicapped children would escape detection if all those obtaining a quotient under 80 were individually examined, but this would involve about ten per cent. of the age-group and it might be necessary to reduce the load by using teachers' estimates to indicate priorities. The teachers' estimates could also be used to bring in any children scoring higher than 80 who were nevertheless suspected of handicap because of poor performance in class. We do not recommend the inclusion of group tests of educational attainment for screening purposes at this age since published tests do not make allowances for the variety of teaching methods which are to be found in infant departments and their use may have undesirable effects on the whole approach to infant teaching.

28. It is of course possible that a few children may not be discovered by these means at the age of seven. The number, however, is unlikely to be so great as to justify the labour involved in a further general screening at a later age. They should reveal themselves by their failure in the ordinary work of the class; but the danger of neglect would be greatly reduced if schools made routine annual returns giving the names of all children who seemed to be making little or no progress.

Chapter III: The "Trainable" Child

29. A smaller number of children are mentally handicapped to such an extent that they are incapable of benefiting from *education* in a special school, but can nevertheless respond to *training* in an occupational centre provided by an education authority.

THE TYPICAL CASE

30. In an occupational centre the child receives training of which the basic aim is to render him, both during and after his school life, as self-reliant, adjusted and acceptable to normal society as his potentialities allow, and to develop any of the skills which children of this category possess, sometimes to a surprising degree. A small number of young people who have been trained in occupational centres can even ultimately be placed in carefully chosen remunerative employment. The child's training is devoted not only to the acquisition of habits of personal cleanliness and of socially acceptable behaviour but also to the development of his sensory skills by a wide variety of activities. These will usually include music, drama, crafts, discrimination of shapes, sizes and colours, exercises in speech and in balance and co-ordination, and other creative and physical activities. Reading and arithmetic are not formally taught, but the child will have practice in recognising everyday words and phrases, such as are found on notices, in counting small numbers of objects, and in recognising the value of coins.

31. Children in occupational centres are admitted in one of two ways. In some cases it is clear when they attain school age that their handicap is too great to allow them to benefit from a special school, and they are placed direct in an occupational centre. In other cases the handicap is less easy to assess, and the child is at first placed in a special school or even admitted to an ordinary school; after a time it becomes clear that he is not making progress there, and he is transferred. Assessments are thus made either before the child begins his school career or after a period of trial, which may last until the age of seven or later. When there is no doubt that he is unsuitable for an ordinary or a special school it is in his interests that he should settle down in the occupational centre as early as possible, without the disturbance caused by unnecessary transfers, and indeed it is the duty of education authorities to provide special educational treatment in occupational centres for children as young as five who are in need of it. But it would be a mistake to attempt to identify at this early age every child who will eventually be classified as trainable. Assessments made at the early age of five are in effect only indications of the child's potentialities; such "present assessments" should be subject to confirmation by later re-assessments in the light of the criteria which we recommend in this chapter. We have already explained in paragraph 21 the need for a complete medical and psychological examination in all cases of suspected mental handicap.

32. In order to define as clearly as we can the range of ability for which occupational centre training is intended we shall try to indicate at what point in the scale a child becomes better suited to an occupational centre than to a special school; and, at the other end of the range, what degree of handicap makes him unfit to benefit from training in an occupational centre.

THE ROLE OF TESTS

33. The Advisory Council's Report of 1951 and the Working Party's Report of 1958 referred to this range as lying between the intelligence quotients 40 and 55. Although we regard it as most important to assess the intelligence of every child, however handicapped, it is often desirable, as we have explained, to place him in an occupational centre at an early age, before his intelligence can be

assessed. This assessment should, however, be attempted as soon as he can respond adequately to formal tests, and the possibility of promoting him to a special school for educable children at that or a later stage should never be overlooked. With these reservations, we do not think that intelligence tests should play as important a part in deciding between a special school and an occupational centre as they should in deciding between an ordinary and a special school.

34. Moreover, we are inclined to think that the borderline at I.Q.55 which has hitherto been widely accepted as dividing the "educable" from the "trainable" child is rather higher than is necessary. While we do not consider that the borderline can be defined in terms of intelligence quotient alone, or even mainly in terms of intelligence quotient, we have come to the conclusion, from evidence received, that 50 rather than 55 should be regarded as the rough lower limit of the special school range, in the sense that children with intelligence quotients between 50 and 55, unless there are other important considerations against it, should usually be worthy of at least a trial period in a special school.

OTHER CRITERIA

35. Intelligence apart, there are certain practical criteria which a child should be able to satisfy if he is to benefit from education in a special school. If he has not already spent a period in a class group of some kind, the requirements which he can be expected to satisfy at the outset are relatively few, but as our list indicates there are others which he must eventually satisfy.

Attitudes to people

- (a) he should be ready and willing to be separated from his mother;
- (b) he should respond to the person in charge of the group;
- (c) sooner or later, he should show an interest in other children and members of the staff, a willingness to make friends, to share toys and equipment, to co-operate in social activities and to accept teaching and authority.

Learning

- (d) he should be able to settle at a given task;
- (e) he should be able to follow simple instructions;
- (f) sooner or later, he should be capable of intelligible speech and the use of a reasonable range of words;
- (g) sooner or later, he must be able to take part in class activities, and particularly show an interest in pre-reading and pre-counting activities.

Independence

- (h) he should show some measure of independence in washing, dressing and feeding himself and in attending to his toilet needs;
- (i) sooner or later, he should show signs of growing maturity and increasing confidence in his own abilities.

36. A mentally handicapped child who can satisfy all these requirements should without doubt be in a special school. If by the age of seven he can satisfy none of them, he should be in an occupational centre (or possibly even a care centre: see the next chapter). A child who can satisfy the more immediate requirements (i.e. (a), (b), (d), (e) and (b)) should not be allotted to an occupational centre until he has had a period of observation in a special school. If by the age of seven, and after a period of at least twelve months, he has made no progress, then this would show that training in an occupational centre is more suited to his abilities. It should, however, be constantly borne in mind that even after the age of seven a child's development rarely proceeds at a steady pace. Children in both occupational centres and special schools should be re-assessed at regular intervals to determine whether they would benefit from transfer from one type of school to the other.

37. Having stated, as definitely as we can, the criteria for placing a child in an occupational centre rather than in a special school, we shall turn in the next chapter to the criteria for placing a child in a local health authority's care centre rather than in an occupational centre.

Chapter IV: The "Untrainable" Child

38. A small percentage of children are so handicapped mentally that they are incapable of benefiting not only from education in a special school but also from the training and activities of the occupational centre. Nevertheless, it is a mistake to assume that any child – with the possible exception of those suffering from certain well-defined clinical conditions – is totally incapable of any training; with skilled handling some very severely handicapped children can acquire a certain degree of independence in their personal habits. The term "untrainable" is therefore a relative one and should not be interpreted too literally.

THE TYPICAL CASE

39. Unlike the children in special schools and occupational centres, those who are likely to be suitable for a care centre can often be identified well before school age – that is, before five – and it is in their own and their families' interests that they should be identified as early in life as is practicable. The Education (Scotland) Act, 1946, as amended by the Mental Health (Scotland) Act, 1960, therefore

- (i) requires an education authority to report to the local health authority at any time after the age of *two* any child whom they have found to be untrainable;
- (ii) allows the parent of any child who has attained the age of *two* to request the education authority to arrange a medical examination of the child.

40. It is thus increasingly likely that untrainable children will be identified at a much earlier age than children in higher categories. In most cases it should be possible to decide well before the age of six whether any given child should attend an occupational centre or a care centre. This points to two important practical principles.

THE ROLE OF TESTS

41. The first is that, while a complete medical and psychological examination of the kind described in paragraph 21 is essential, formal tests of intelligence – to say nothing of educational attainment tests, which would be altogether pointless – are of much less assistance than they are in distinguishing special school children from ordinary school children. The next chapter refers to the limitations of the usual individual measures of intelligence at ages below seven and to these limitations must be added the difficulty that in comparison with children of the same chronological age these children are at a very low point in the range of ability. This does not mean that no attempt should be made to test their natural mental ability: but in the case of a child aged five at this low level, to express the result in terms of a certain intelligence quotient is misleading: this is justifiable only at a later age, and whatever tests are applied at this stage should be repeated after an appropriate interval.

42. The Advisory Council's 1951 Report and the Working Party's 1958 Report both accepted an intelligence quotient of 40 as the approximate lower limit to the intelligence of children whom they regarded as trainable in occupational centres. In the light of experience our view is that to attempt to relate this lower limit to any specified intelligence quotient will mislead more often than it will assist.

43. When the child is able to co-operate and participate in tests, however, these should be applied since they may help to indicate the nature and extent of his potentialities; but they should not be used to decide in which type of centre he should be placed. It is of course even more important in such cases

- (i) that not one but a series of tests or scales, covering not only intelligence but also emotional maturity and adjustment, should be used;
- (ii) that they should be interpreted in the light of information from the parents, the family doctor, the school medical officer and other sources, and of observation by the staff of the centre if the child has been there;
- (iii) that the assessment, however complete, should not be a process which takes place only once, but should be repeated as often as required before the child's future is decided, and that even then further assessments should be made regularly.
- (iv) that care should be taken not to impose a strain on a severely handicapped child by giving him tests at too early an age.

THE TRIAL PERIOD

44. The second principle is that if there is doubt whether a child is more suited to an occupational centre or to a care centre, he should be given a trial in the type of centre where he is most likely to develop any latent powers to the greatest extent – that is, in the occupational centre. Since occupational centres do not admit children below the chronological age of five, this means that at that age some of the children who may have been admitted earlier to a care centre should be considered for transfer to an occupational centre; and that even at later ages the possibility of giving a child a trial period in the occupational centre should never be overlooked.

45. After a child has been reported by the education authority as unsuitable

for training he becomes the responsibility of the local health authority. Although the parent is entitled to ask the education authority to review their decision it is also the duty of the local health authority to initiate such a review whenever they think fit. We would emphasise that local health authorities should be vigilant to ensure that a child is given every opportunity of transfer to an occupational centre if his development justifies this.

THE CRITERIA

46. Subject to these principles, it is possible to state some general criteria for deciding whether a child at the age of five or later should be given a trial in an occupational centre:

- (a) *Communication*: The child should be able to communicate with adults to a certain extent, however limited. If he is retarded, however, in acquiring speech, the causes should be investigated, with the possibility of deafness particularly in mind; but in order to benefit from attending an occupational centre he must obviously be able to understand simple instructions and indicate his own basic needs.
- (b) *Mobility and Manipulation*: He should not be refused a trial simply because he cannot walk; even chair-bound children may benefit from attending the occupational centre.¹ In any case, a specialist medical examination should be undertaken whenever the diagnosis of the cause of the child's immobility, or the prognosis, is in doubt. It is, of course, essential that circumstances should make it possible for him to attend the centre and return home daily, either by special transport or escorted by adults.
- (c) *Feeding*: He should be able to feed himself, if necessary with help and encouragement, or at least appear capable of learning to feed himself. Initial inability to feed himself through poor motor control will often disappear gradually at the centre as time goes on.
- (d) *Toilet Training*: He should be toilet-trained, or at least able to indicate his needs. The causes of persistent wetting or soiling should be investigated and the possibility not only of organic defects, but also of neglected training or emotional difficulties at home should be kept in mind; in such cases sphincter control may very well be achieved with understanding management in the occupational centre.
- (e) *Social Behaviour*: He should have reached the stage at which he can be separated from his mother without suffering undue or prolonged distress. If after a trial period – during which the mother is encouraged to bring and remain with him for at least part of the day – the child is still unhappy, then he is not yet suitable for the occupational centre. This does not necessarily mean, however, that he should be transferred to a care centre; it means that he is not yet ready to leave home even for part of the day.

The child should, before very long, be able to associate fairly happily in play, feeding and other activities with the other children. Children who display hyperactive, destructive, aggressive, inhibited or solitary behaviour should nevertheless be considered for admission to an occupational centre

¹ These conditions assume that there are attendants available in the occupational centre in addition to the instructors.

where play and group activities may provide the therapy which they need and where diagnostic observation should be possible.

- (f) *Training*: The child should sooner or later show signs of being able to participate in at least some of the simple sensory training and other activities which are, after all, among the main benefits which the occupational centre has to offer.

47. These criteria, as we have defined them, are not inflexible; they allow for the admission, on trial, to an occupational centre of a child who shows some promise of being able to meet them. But if a child over the age of seven, after a trial period in the occupational centre and any psychotherapeutic or medical treatment which seems to be indicated, fails on *any one* (not all) of these criteria, we doubt whether the resources of the ordinary occupational centre should be strained to cope with him; the presence of even a few incontinent or immobile children would be a distraction to the group as a whole and would make heavy and possibly unjustifiable demands on staffing. At present there are very few local health authority care centres in Scotland, but their number is expected to increase under the new schemes which local authorities have been asked to draw up for their mental health services. As soon as such centres are available, children of this level should be cared for there.

Chapter V: Tests of Intelligence and Educational Attainment

48. In the preceding chapters we have indicated the part which, in our view, should be played by formal tests in the wider process of deciding which type of school or centre is best suited to the educational potentialities of the child. We have suggested that a good deal of weight should be attached to the results of such tests in assessing children whose handicap is near the upper end of the range with which we are concerned, but that in the case of those with a more severe degree of handicap the emphasis should fall instead on other criteria. Moreover, there is a mental age below which the value of applying tests to a child is very doubtful, so that the younger the child and the wider the gap between his chronological and his mental age, the more limited is the usefulness of tests. Nevertheless, every child whose handicap does not make it impossible for him to respond to a test should be tested, since the results may help not only to select the best educational environment for him but also to indicate the techniques which should be employed in the effort to make the fullest use of his abilities. In this chapter we shall describe in more detail the tests which are the most widely employed for this purpose. New tests, however, are devised from time to time, and old ones improved; and the lists that follow will require regular revision if they are to be helpful.

GROUP TESTS

49. For the preliminary screening suggested in paragraph 27, group tests of intelligence given at age seven should suffice. They must be of a non-verbal type since the reading abilities of children of that age are limited. Such tests of course serve other useful purposes in the educational system and they should not be

given, nor should the impression be that they are being given, solely for the purpose of distinguishing pupils who need special educational treatment. The following non-verbal group tests of intelligence at present in use by various education authorities have been found to be satisfactory:

Moray House Picture Intelligence Test (MHT (Pic) 1).

Norms available for children aged 6½-8 years. (University of London Press.) MHT (Pic) 2 is now ready and norms are being prepared.

Glasgow Picture Intelligence Test Forms A and B. Norms available for children aged 6½-7½. Produced and published by Glasgow Education Committee.

50. Although the 1951 Report (paragraph 69) recommended that group tests of intelligence discriminative at intelligence quotients of approximately 70 should be devised for children of seven years, we are doubtful about the need for this, since in our view group tests should be used only for a preliminary screening.

51. Seven-year-old children should be tested in groups of not more than twenty. The tests may be administered by infant mistresses or other teachers, provided that they have had instruction from someone with professional training in the administration of intelligence tests. During such instruction stress should be laid on the importance of strict observance of all the rules of administration. It is probably better that the test should not be given to a group of children by their own teacher, as the test situation is so different from the normal teaching situation.

INDIVIDUAL TESTS

52. The further investigation of children who, on the group tests, have a quotient of less than 80 – and of any other children who seem to their teachers to have undue difficulty in learning – will include individual testing

- (i) of intelligence;
- (ii) of educational attainment.

INDIVIDUAL INTELLIGENCE TESTS

53. The following intelligence tests are at present widely used:

Revised Stanford-Binet Scale (usually called the "Terman-Merrill revision") 1937.¹ For ages 2 and over. See "Measuring Intelligence," by Lewis M. Terman and Maud A. Merrill. (Harrap & Co. 1937.)

It should be used with the modifications made by the Scottish Council for Research in Education (Kennedy Fraser, 1945) and with the correction table by Fraser Roberts and Margaret Mellone (1952). In reporting the test score the original as well as the corrected intelligence quotient should be stated.

Wechsler Intelligence Scale for Children (The "WISC") 1949.

For ages 5-15. Manual with material supplied by the National Foundation for Educational Research in England and Wales. Norms for Scottish children aged 5 to 11 are being prepared by the Scottish Council for Re-

¹ A new version of the Terman-Merrill Test and Manual is expected to be published by Harrap & Co. within a few months.

search in Education, but will not be ready until 1962 at the earliest. The value of this scale is limited in the case of young children who are also backward, and its main value lies with the older child.

SUPPLEMENTARY INTELLIGENCE TESTS

54. In many cases it may be advisable to apply supplementary tests for the purpose of corroborating the quotient obtained by means of the Terman-Merrill Test or the WISC, or of obtaining additional information about the child. The following tests are useful for this purpose:

Merrill-Palmer Scale of Mental Tests. Latest revision 1931. For ages 24-63 months. See "Mental Measurement of Pre-School Children" by Rachel Stutsman (World Book Company, New York 1953). This is a particularly useful scale for pre-school children or for younger mentally handicapped children.

Goodenough Intelligence Test (also called Draw-a-man) 1926. For ages 3-13 years. See "Measurement of Intelligence by Drawings" by Florence L. Goodenough. (Harrap & Co. 1926.)

The Porteus Maze Test. Latest revision 1955. For ages 3 and over. See "The Porteus Maze Test Manual" by S. D. Porteus. (Harrap & Co. 1952.)

Raven Coloured Progressive Matrices. Sets A, Ab and B 1947. For ages 5-11. See "Progressive Matrices" by J. C. Raven. (H. K. Lewis & Co. 1947.)

Vineland Social Maturity Scale. Latest revision 1953. For ages from birth to maturity. See "The Measurement of Social Competency" by Edgar A. Doll. (Educational Test Bureau 1953.) This is not an intelligence test, but a developmental scale to be used in the course of interviews with parents.

ATTAINMENT AND DIAGNOSTIC TESTS

55. As we have suggested in paragraph 27, group tests of attainment should not be used as screening tests for purposes of ascertainment although they may be of use in other ways. Most of the following attainment tests are designed for individual application and are of value in estimating the levels of attainment of children of school age in the course either of the original assessment or of later re-assessment. There are also diagnostic tests, marked *, which are of value not only for the purpose of assessment but also for detecting the educational difficulties of the child and the point at which remedial measures should start.

READING

The Graded Word Reading Test

The Burt (Rearranged) Word Reading Test } 1938. For ages 4 to 14.

See "The Standardisation of a Graded Word Reading Test" by P. E. Vernon. (University of London Press 1938.)

**Neale Analysis of Reading Ability* by M. D. Neale. (MacMillan 1958.)

The Schonell Reading Tests. 1955. For ages 5-15.

Test R 1: Graded Word Reading Test for ages 5-15.

R 2: Simple Prose Reading Test for ages 6-9.

R 3: Silent Reading Test A for ages 7-11.

- See "Diagnostic and Attainment Testing," Fourth Edition, by Fred J. Schonell and F. Eleanor Schonell. (Oliver & Boyd 1960.)
- Crichton Vocabulary Scale*. 1950. For ages 4-11. For use with Coloured Progressive Matrices. J. C. Raven. (H. K. Lewis & Co. 1950.)
- Holborn Reading Scale*. 1948. For ages 5½ to 11. (Harrap & Co. 1948.) See "The Language and Mental Development of Children" by A. F. Watts. (Harrap & Co. 1944.)

ARITHMETIC

- Staffordshire Arithmetic Test*. For ages 7-15 years. See "Manual with Answers and Norms" by M. E. Hebron. (Harrap & Co. 1958.)
- One-Minute Oral Addition and Subtraction Test*. 1923. For ages 5-13. See "The New Examiner" by P. B. Ballard. (University of London Press 1923.)
- **Schonell Diagnostic Arithmetic Tests*. Latest revision 1957. Twelve Tests for ages 7-13. See "Diagnostic and Attainment Testing," Fourth Edition by Fred J. Schonell and F. Eleanor Schonell. (Oliver & Boyd 1960.)
- Mechanical Arithmetic Tests 2A and 2B*. For ages 7-8½. National Foundation for Educational Research in England and Wales, 1958.

SPELLING

- Graded Vocabulary Test*. C. Burt. See "Mental and Scholastic Tests" by C. Burt. (Staples Press 1947.)
- Graded Word Spelling Test*. Forms A and B. 1950. For ages 5-15. See "Diagnostic and Attainment Testing," Fourth Edition, by Fred J. Schonell and F. Eleanor Schonell. (Oliver & Boyd 1960.)

NORMS

56. Since the purpose of intelligence and attainment tests is to measure the child's mental and educational levels it is necessary that the score he obtains in a particular test should be capable of being related to some standard or "norm" based on the scores which children of the same age obtain in the same test. Those who have experience in the use of these tests of attainment are aware that the norms provided are not always satisfactory. If the test has been standardised in England care must be taken in applying the norms to Scottish children. If the norms were established many years ago they may not accurately represent the position to-day. On the other hand it must be borne in mind that the purpose of the assessment is not to estimate with a high degree of accuracy the child's reading age or reading quotient, for example, but to determine whether he is so far below the level of his age-group that special educational treatment may be required.

RECORDING TEST RESULTS

57. It will be clear from what has been said in this chapter that the bald statement of an intelligence quotient or educational attainment quotient can be misleading. When such quotients are being reported or recorded the designation of the test and the age of the child - in years and months - at the time of testing should be stated.

ADMINISTRATION OF TESTS

58. Since instruction in the use of intelligence and other psychological tests is the subject of certain professional courses of training, it is unnecessary for us to detail the precautions with which they should be used or the results interpreted. We emphasise that individual tests of intelligence, educational attainment and other individual psychometric tests are a reliable basis for assessment only if they are administered by persons professionally trained and experienced in the use and evaluation of a wide range of these tests.

Chapter VI: Borderline Cases in Ordinary Schools

59. In Chapter II we recommended that, when there was doubt whether a child was fit to remain in the ordinary school, he should be given instruction individually or in a small group for a period of weeks or months so that his learning rate under favourable conditions could be assessed. The practical implications of this suggestion were discussed with educational psychologists in both urban and rural areas. All were fully in agreement that there was a need for sustained expert observation of borderline cases. A few described arrangements which had already been made to meet the need in their areas. Others reported that the general shortage of teaching staff made any such arrangement impracticable at the present time.

POPULOUS AREAS

60. The problem is most easily solved in areas which have built up an adequate "adjustment" service for backward and retarded children; the teaching staff provided for this wider purpose can then be given the extra duty of observing and reporting on children referred for possible transfer to special schools. Indeed, where such a service is fully organised this is not an extra duty, since the borderline children are included in the larger number referred to the adjustment teachers and the question of their transfer to a special school does not arise until they have already proved unfit to profit from ordinary schooling even with extra help.

61. The pattern of provision for backward and retarded children varies greatly from one area to another, but it seems to be most successful in those areas where the adjustment teachers (often part-time but chosen with great care) have been formed into a team working as an extension of the child guidance service and under its direction. Such a system appears to work well in Edinburgh, where the adjustment service is located in about two-thirds of the primary schools and controlled from the central child guidance clinic. The aim is to give remedial help to all children in need of it, and so far as possible to anticipate the need by the use of a screening test at age seven. From time to time retarded children in smaller schools not included in the scheme are transferred to schools which have adjustment teachers. Ayrshire has for many years retained a team of tutorial teachers, working either in schools or in child guidance clinics in close co-operation with the psychologists for their own areas: in schools where no tutorial help is available the psychologist may give advice to the class teachers or arrange for children to be brought into a town clinic for daily instruction.

62. Unfortunately, in some of the most populous areas in the country the general shortage of staff is so severe at present that it is not possible to organise a comprehensive system of tutorial instruction. Consequently in those areas opportunities for sustained expert observation of borderline cases occur much less frequently than could be desired, although there is a general willingness to offer tutorial help whenever it can be arranged, for example, by taking children into child guidance clinics on one or two days each week, by offering general guidance to class teachers or by trying to find someone else on the school staff who is able and willing to assist. In one or two places it was suggested that "ascertainment classes," drawing children from a group of schools, might be established. This idea appears to offer some promise as a second-best solution, but it has several disadvantages; there might be difficulties of transport, and parents might be subjected to considerable anxiety if the children were being removed from their own schools for investigation.

RURAL AREAS

63. A quite different problem exists in rural areas where the schools are widely scattered, but in some ways it is more manageable. Educational psychologists have by now been appointed in most of the outlying counties and, although they have to work without the help of adjustment teachers, the total number of children to be ascertained is very much smaller than in the urban areas and the number of difficult borderline cases is smaller still. When good relations have been established with the country schools it is often quite practicable to keep a number of children under close observation by giving detailed advice to the class teachers and making follow-up visits at intervals. The success of such an arrangement will always depend, of course, on co-operation between the psychologist and the teachers and on the arrangements which can be made within the school by mutual agreement between the members of staff to give individual help to borderline pupils when required. Classes in country schools tend to be smaller than in the large towns, and there is hope of good co-operation if the teachers are made to feel that their reports will be closely studied and given due weight in any decision affecting a child's future.

Chapter VII: Conclusion

64. Since we have tried to formulate our standards as briefly as can be done with precision, we shall not attempt a summary which could only oversimplify our views, but shall content ourselves with some final observations.

65. In the great majority of cases the tests and other criteria which we have recommended, if applied by persons with the appropriate professional training and experience, will serve as the basis for a sound assessment of the best form of educational treatment for the individual child. Nevertheless new tests are constantly being devised, and old ones improved, and there is room for further research into every aspect of this problem. In particular we hope that there will be further work on the following subjects:

- (i) adaptation for Scottish children of the new Terman-Merrill Test referred to in the footnote to paragraph 53;
- (ii) preparation of Scottish norms for the more widely used tests of attainment named in paragraph 55;

- (iii) investigation into the value of any existing Gaelic translations of tests and the need for any new translations;
- (iv) research into the possibility of devising scales or inventories of sensory and motor development and social adaptation on the lines of existing maturity scales or inventories but at a level which would enable staff of special schools and occupational centres to report in fairly precise terms upon the results of prolonged observation of their children;
- (v) research into the possibility of estimating the predictive value of specific criteria used in allocating children to special schools, occupational centres or care centres, by following up their subsequent careers both while they are of school age and immediately thereafter and comparing them with one another and with borderline cases retained in ordinary schools.

66. We have deliberately refrained from modifying any of our recommendations so as to take into account the special problems of organisation and administration which they will undoubtedly create, for example in sparsely populated areas where the number of handicapped children within daily travelling distance of any one school may be too few to justify elaborate provision. No administrative argument will do away with or modify the needs of such children, and we leave it to those responsible for developing local educational facilities to devise practicable methods in their own special circumstances of meeting these needs. One of the purposes of our report is to assist education authorities to discover the extent of the needs of their areas for special educational provision, and if we had modified our criteria to take into account the problems which they may pose in various parts of Scotland the only result would have been to disguise these needs instead of encouraging authorities to find ways of meeting them.

ACKNOWLEDGMENT

67. In the preparation of this report we have been greatly indebted to our Secretary, Mr. A. W. M. Heggie, for his very efficient services. Valuable assistance has also been given by the Assistant Secretary, Mr. J. C. McLean. We desire to record our gratitude to them both, and our appreciation of all their work.

We have the honour to be, Sir,
Your obedient Servants,

(Signed) NIGEL WALKER (Chairman)

R. BAILEY	M. M. MACRAE
WM. N. BOOG WATSON	WILLIAM MALLINSON
CONSTANCE F. DRYSDALE	MARGARET MARTIN
JAS. B. FRIZELL	ANNE T. PATERSON
HUGH B. JONES	DAVID A. WALKER
ANNE H. MCALLISTER	BARBARA S. WATSON
JOHN MCKINNON	W. ANDERSON
D. MACLEOD	W. W. SINCLAIR

A. W. M. HEGGIE (Secretary)

St. Andrew's House, Edinburgh, 1.
29th June, 1961.

Appendix

SOURCES OF EVIDENCE

Organisations and individuals who gave oral evidence or submitted memoranda to the Working Party:

Notre Dame Child Guidance Clinic, Glasgow

Scottish Society for Mentally Handicapped Children

N. T. Birkett, Esq., Jordanhill College of Education

R. P. Clark, Esq., Aberdeen College of Education

Miss H. E. Clinkard

Dr. A. F. Alford, C.B.E.,
Senior Medical Officer

J. Lumsden, Esq.,
H.M. Staff Inspector

} Ministry of Education

Dr. Mary Collins, Department of Psychology, Edinburgh University

Miss Marjory Cowe, Moray House College of Education

Dr. Elizabeth Fraser, Department of Psychology

Dr. J. D. Nisbet, Department of Education } Aberdeen University

P. A. D. Gardner, Esq.

Dr. D. H. Stott } Department of Psychology, Glasgow University

Miss M. M. George, Headmistress, Dawson Park School, Falkirk

Miss J. Reid, Department of Education, Edinburgh University

Miss A. K. Seggie, Dundee College of Education

G. W. Sturrock, Esq., Department of Education, St. Andrews University

P. E. Vernon, Esq., Professor of Educational Psychology, University of
London Institute of Education.